

Application No. 09/822,298
Amendment dated September 28, 2004
Reply to Office Action of July 29, 2004

Remarks/Arguments

Applicants have received and carefully reviewed the Office Action of the examiner mailed July 29, 2004. Reconsideration and reexamination are respectfully requested.

Rejection under 35 U.S.C. § 102(b)

In paragraph 2 of the Office Action, the Examiner rejected claims 1, 2, 5, 32, 36, and 44-47 under 35 U.S.C. §102(b) as being unpatentable over Hoag (No Such Thing As Doomsday). Applicants respectfully traverse this rejection.

Independent claim 1 recites a building having air supply and return ducts comprising at least one room having openings to accommodate the building air supply and return ducts, an oxygen source, and a carbon dioxide scrubber. The room is substantially sealed off from the air supply and return ducts.

The Examiner states that Hoag discloses a shelter building with multiple rooms, where the building has an HVAC system having air intake and exhaust ducts. The Examiner states that Hoag teaches that in case of biological or chemical attack the building shelter has to be sealed from the outside air, and that as a result, the air ducts of at least one room are sealed from the outside air. The Examiner also states that Hoag teaches a room within the shelter being sealed from the outside environment using gate valves. Claim 1, however, recites a building having a room substantially sealed off from the air return and supply ducts. The air return and supply ducts are in the building, and the room has openings to receive those ducts, so sealing off the room from the ducts results in the room being sealed off from the building. As stated by the Examiner, Hoag discloses sealing off the entire building from the outside environment. Thus, while rooms in Hoag's shelter are also effectively sealed off from the outside environment, the rooms are not sealed off from the air return and supply ducts in the building, as is recited in independent claim 1. The entire disclosure of Hoag appears to be directed to building a shelter, which may contain separate rooms, where the entire shelter is to be sealed off from the outside environment. There is no teaching, suggestion, or motivation in Hoag of a building with separate rooms in which a room is sealed off from the air return and

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supply ducts of the building. As Hoag fails to teach each and every limitation of the independent claim 1, and the claims dependent thereon, withdrawal of the rejection is respectfully requested.

Dependent claim 44 recites the building of claim 1 further comprising means for substantially sealing off the room from the building air supply and return ducts. Claim 44 is clearly patentable over Hoag because, as stated above, Hoag discloses sealing the entire building off from the outside environment. One of ordinary skill in the art, upon reading Hoag, would be instructed on how to build a shelter with blast valves or other means for sealing off the entire shelter building from the outside environment. Hoag does not teach or suggest a shelter building in which individual rooms are also provided with means for sealing off from the building. Hoag is directed to using the entire shelter as a means of protecting people from a chemical, biological, or nuclear attack. Hoag does not appear to discuss or teach an embodiment in which individual rooms of the shelter would be modified to be sealed from the rest of the building. Additionally, because Hoag is concerned with providing a shelter, the entirety of which is sealed from the outside, there is no motivation for modifying Hoag's shelter to include additional sealing means for sealing off individual rooms from the remainder of the shelter.

The Examiner asserts that Hoag teaches "means for sealing off the room", however, the part of Hoag on which the Examiner relies (page 6) actually discloses that circumstances may arise where the shelter occupants may be forced to close up the shelter and "discontinue bringing in fresh air from the outside." Thus, while Hoag teaches sealing off the entire building from the outside, Hoag does not teach or suggest sealing off a room from the building air and return ducts, as is recited in claim 44. Hoag fails to teach the limitations of claim 44 and thus cannot be deemed to anticipate the claim. Withdrawal of the rejection is respectfully requested.

Independent claim 32 recites an enclosure having one or more air supply and/or return ducts connected to a building HVAC system and means for substantially sealing off the enclosure from those ducts. For at least the reasons set forth above, independent claim 32 is also distinguished from Hoag. Hoag discloses sealing off the entire building from the outside and does not teach or suggest means for substantially sealing off an

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enclosure from the air supply and/or return ducts connected to the building's HVAC system. Hoag thus fails to teach each and every limitation of the claim.

Independent claims 36 and 45 are similarly distinguished from Hoag because the claims recite an enclosure or room substantially sealed off from the air supply and return ducts, which ducts are part of the building. Thus the enclosure or room is sealed off from the remaining building. Hoag teaches sealing off the entire building from the outside environment and thus does not teach each and every limitation of the claims.

If the above rejection is maintained, Applicants respectfully request the Examiner point out particular sections of the Hoag reference where the asserted teachings are found.

Rejections under 35 U.S.C. § 103(a)

In paragraph 5 of the Office Action, claims 3, 4, and 33-35 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hoag in view of Mulcahy (US 4,901,715). In paragraphs 6 and 7 of the Office Action, claims 6-8 and 37-38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hoag in view of the Applicants' admitted state of the art.

Hoag fails to teach the limitations of the independent claims for at least the reasons set forth above. The Examiner admits that Hoag fails to teach an oxygen generator that includes an exhaust tube that has a terminal free end outside the room. The Examiner asserts that it would have been obvious to modify the invention of Hoag and add a plumbing fixture having a water trap and exhaust tube as taught by Mulcahy in order to exhaust the unused oxygen from the user's atmosphere. Applicants respectfully traverse the rejection.

Applicants submit that there is no motivation to combine the references because Hoag specifically teaches sealing off the shelter from the outside environment and supplementing the oxygen supply inside the shelter (see page 6 of Hoag), while Mulcahy is directed to a device to be used with a plumbing fixture, such as a toilet, in order to bring oxygen from the atmosphere into a room in a burning building. The entire disclosure of Hoag is directed to avoiding what Mulcahy is striving to do - bring outside

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air into a building. Thus, there is no motivation for one to combine the teachings of Mulcahy and Hoag.

Additionally, even if one were to combine Mulcahy and Hoag, one would essentially destroy the functionality of Hoag's shelter. Hoag teaches sealing off the shelter from the outside environment, that is, preventing outside air from entering the shelter. If one were to modify the shelter of Hoag with the device of Mulcahy, one would breach that seal and bring outside air into the shelter. The Examiner states exhausting the unused oxygen from the user's atmosphere as a reason for combining the references. There is no indication in Hoag or Mulcahy that this is desired, nor is there any indication that Mulcahy achieves this effect. Mulcahy teaches providing oxygen from the outside to the inside, not exhausting excess oxygen. Claims 6-8 and 37-38 are distinguished over Hoag for at least the reasons set forth above in the discussion of the independent claims from which they depend.

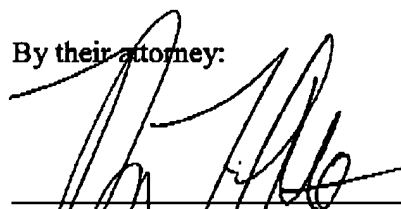
Reconsideration and reexamination are respectfully requested. It is believed that all pending claims, namely claims 1-8 and 32-47, are in condition for allowance. Issuance of a notice of allowance in due course is respectfully requested. If a telephone conference would be of assistance, please contact the undersigned attorney at 612-677-9050.

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Respectfully Submitted,

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By their attorney:



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